National Drought Management Authority

TAITA TAVETA COUNTY
DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2017

NDMA

A Vision 2030 Flagship Project

KENYA VISION 2030

October EW PHASE

Drought Status: ALERT

Maandalizi ya mapema

Drought Situation & EW Phase Classification
Biophysical Indicators

- The county received light rains in the fourth week of October.
- Though unevenly distributed the rains promoted pasture regeneration and recharge of water sources.
- Vegetation condition index stood at 32.26 depicting moderate vegetation deficit.

Socio Economic Indicators (Impact Indicators)
Production Indicators

- Planting continued in most parts of the county.
- Livestock body condition was fair especially for cattle.
- Milk production was below normal. However, there was an improvement compared to previous month.
- Livestock migration was normal and no livestock deaths were reported.

Access Indicators

- Milk consumption was below normal.
- Livestock distances remained within the normal range.
- Marauding elephants destroyed fruit trees and crops.
- Terms of Trade were below the normal range.

Utilization Indicators

- The proportion of children at risk of malnutrition was within normal range.

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming: Food Crops/ Livestock	Alert	Deteriorating
Mixed Farming: Food Crops/ Horticulture/Dairy	Alert	Deteriorating
Mixed Farming: Irrigated Cropping/ Livestock/Food Crops	Alert	Deteriorating
Casual Waged Labour: Sisal Farms	Normal	Stable
National Park	Alert	Deteriorating
Trade/Business	Normal	Stable
County	**Alert**	**Deteriorating**

Biophysical Indicators	Value	Normal Range/ Value
Rainfall (% of Normal)	95	80 - 120
SPI-3Month (TAMSAT)	-0.04	-1.0 to 1.0
VCI-3Month	32.26	35-50
Production indicators	**Value**	**Normal**
Maize Crop Condition	Planting	Planting
Livestock Body Condition	Fair	Good
Milk Production	14.0	19.6 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (drought)	No death	No death
Access Indicators	**Value**	**Normal**
Terms of Trade (ToT)	84.5	84.6
Milk Consumption	6.0	6.5 litres
Return distance to water sources	3.1	<5 Km
Return distance to grazing areas	4.5	<6 Km
Cost of water (20 litres)	5	< Kshs 5
Utilization indicators	**Value**	**Normal**
Nutrition Status, MUAC (% at risk of malnutrition)	1.7	<6.6

Seasonal Calendar

▪ Short rains harvests ▪ Increased HH Food Stocks ▪ Short dry spell ▪ Reduced milk yields ▪ Land preparation	▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase	▪ Long rains harvests ▪ Increased HH Food Stocks ▪ A long dry spell ▪ Land preparation ▪ Kidding (Sept)	▪ Short rains ▪ Planting/weeding

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The county received light rains in the last dekad of the month under review.
- The rains were of an average of 8mm recorded on the 24th, 27th and 29th.
- Mwarungu station in mixed farming; horticulture/ dairy livelihood zone recorded two days moderate rains totalling 8.6mm.
- According to WFP-VAM, CHIRPS/MODIS chart below, both rainfall estimates and NDVI averages are below the LTM. Three months rainfall anomaly was at 95% while NDVI at 94%.
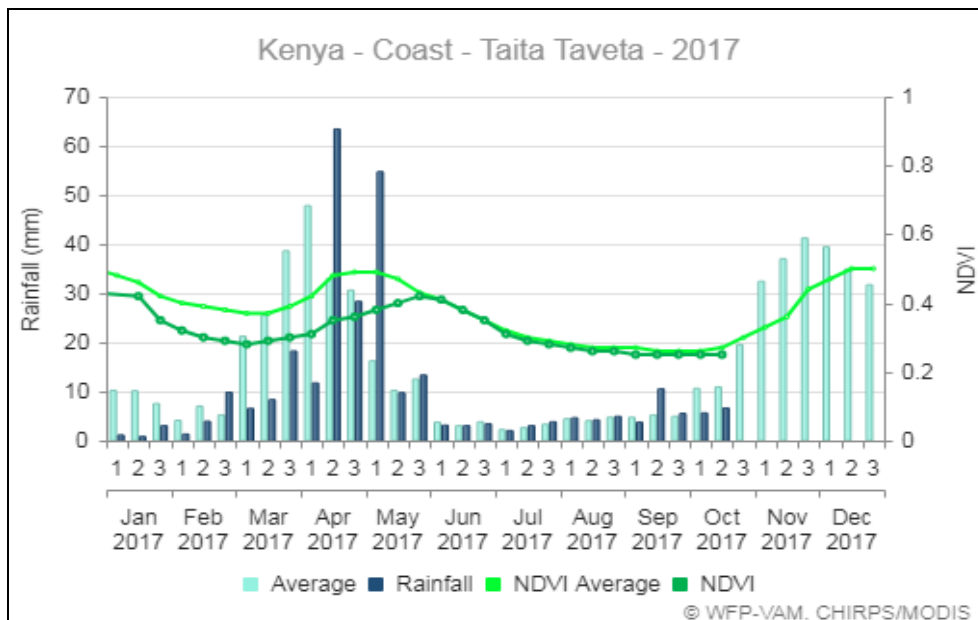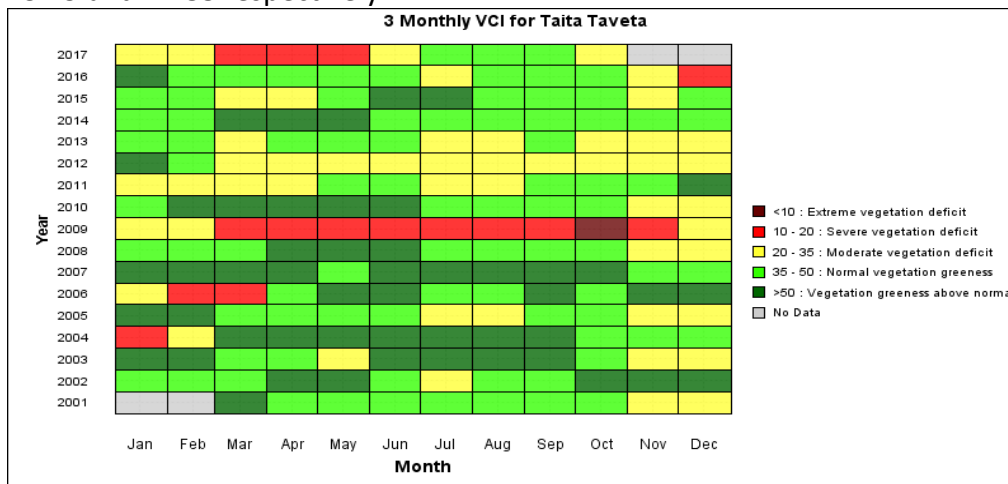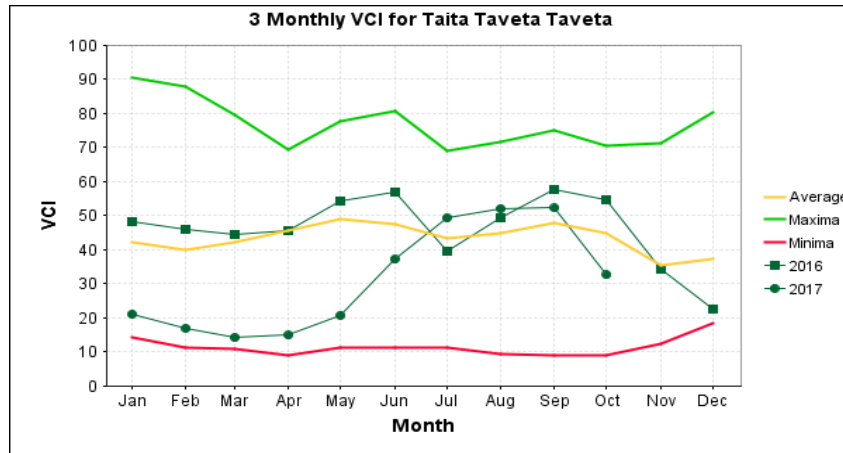

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The county recorded an average VCI value of 32.26 depicting moderate vegetation deficit. Taita and Mwatate Sub Counties recorded lowest vegetation deficit values of 25.49 and 27.88 respectively.

3 Monthly VCI for Taita Taveta Taveta

2.1.2 Pasture

- Based on community interviews and field observation in some pockets pasture condition was fair to poor.
- In sections of Voi sub county (Maungu) that received off season rains during the month of September, pasture regeneration was observed and the condition ranged from fair to good.
- The short rains are expected to improve and enhance pasture quality and quantity respectively.
- During the month 52.4 and 47.6 percent of the community interviews showed that pasture condition was fair and poor respectively.
- Relatively, the situation was better in mixed farming: irrigated cropping/livestock and mixed farming: horticulture/dairy livelihood zones where all communities reported pasture condition to have been fair while in the mixed farming: food crop/livestock zone 61 percent and 39 percent reported pasture to have been poor and fair respectively.

2.1.3 Browse

- Generally, the browse condition was fair. Community interviews conducted indicated 71.4 and 28.6 percent of browse condition was fair and poor respectively.
- The situation is normal for this time of the year. Poor browse situation was reported in mixed farming; food crop/ livestock livelihood zone particularly in pockets that never received off season rains.
- No constraints were observed in accessing browse in the month under review.

Taita Taveta Pasture Condition (Oct 2017 - Oct 2017)

Taita Taveta Browse Condition (Oct 2017 - Nov 2017)
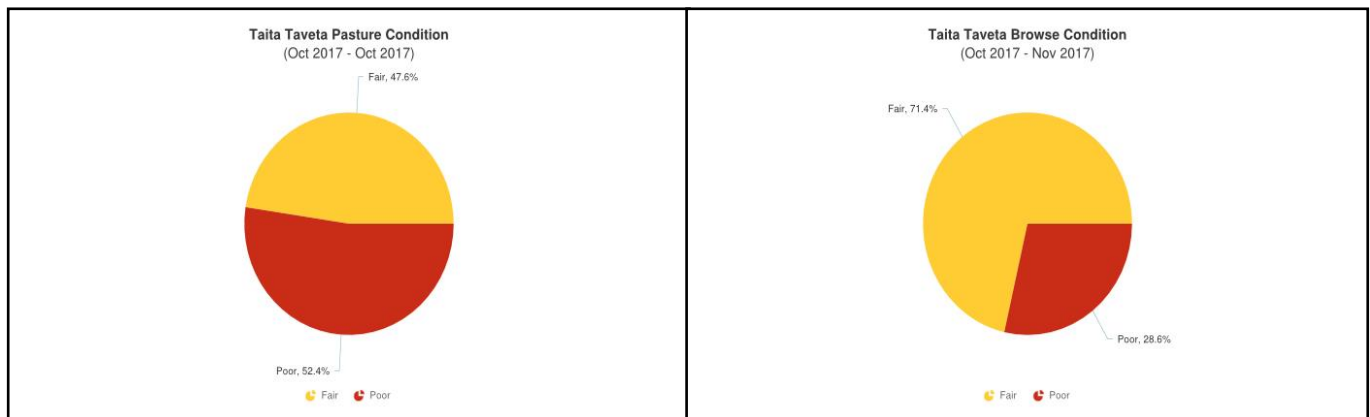
2.2   WATER RESOURCE
2.2.1   Sources
- The main water sources were rivers, springs, bore holes, shallow wells and pans & dams at 27.9%, 23.3%, 18.6%, 23.3 % and 7.0% respectively.
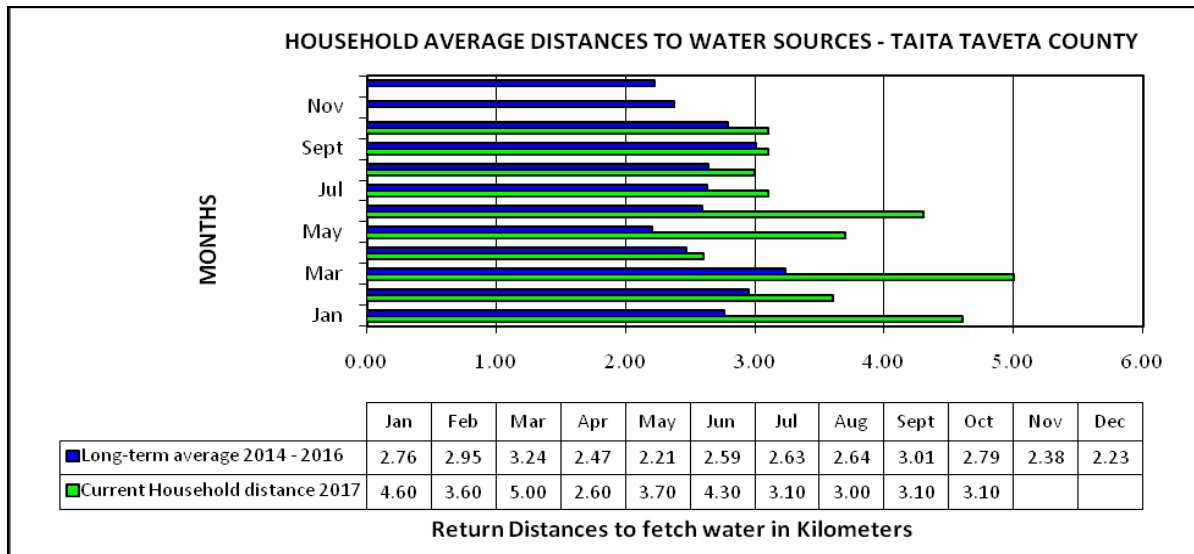- Mwatate dam and lower zone of Voi River remained dry in the month under review which is not normal at this time of the year.

Taita Taveta County Water sources (October, 2017)
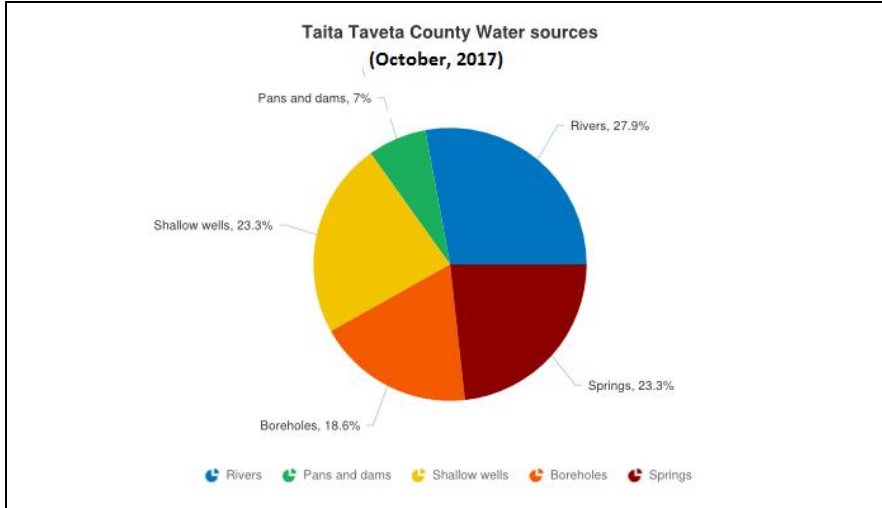
2.2.2   Household access to Water.
- Compared to the previous month, return distance to water sources remained at 3.1 km but above the long term average by 11 percent.
- The average cost of 20 litre jerry can was at Kshs 5. However, in the mixed farming: food crop/ livestock livelihood zone water vendors sold at Kshs 20.
- Approximately, 71 percent of the households purchased water and water consumption per day per person was at 9.4 litres.

HOUSEHOLD AVERAGE DISTANCES TO WATER SOURCES - TAITA TAVETA COUNTY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
■ Long-term average 2014 - 2016	2.76	2.95	3.24	2.47	2.21	2.59	2.63	2.64	3.01	2.79	2.38	2.23
■ Current Household distance 2017	4.60	3.60	5.00	2.60	3.70	4.30	3.10	3.00	3.10	3.10		

Return Distances to fetch water in Kilometers

2.2.3 Livestock Trekking distances to Grazing Areas

- Compared to previous month average return distance by livestock to grazing areas remained at 4.5 km and longer than long term average by 80 percent
- Long trekking distances were reported in a few pockets in the mixed farming: food crop/ livestock livelihood zone. Return distances was recorded at 8km due to increased distances from the grazing areas to the water points following depletion of pasture in their normal grazing areas.
- Livestock trekking distances remained normal in the mixed farming: horticulture/ dairy and mixed farming: irrigated cropping/ livestock livelihood zones. Also livestock watering remained normal i.e. twice per day.


AVERAGE GRAZING DISTANCES - TAITA TAVETA COUNTY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Long-term average 2014 - 2016	4.25	4.10	4.00	3.60	3.60	2.70	2.60	2.40	2.30	2.50	2.20	2.25
Current Grazing distance 2017	2.90	3.70	2.30	2.30	1.70	1.70	5.10	4.90	4.50	4.50		

Return Distances to Grazing Areas in Kilometers
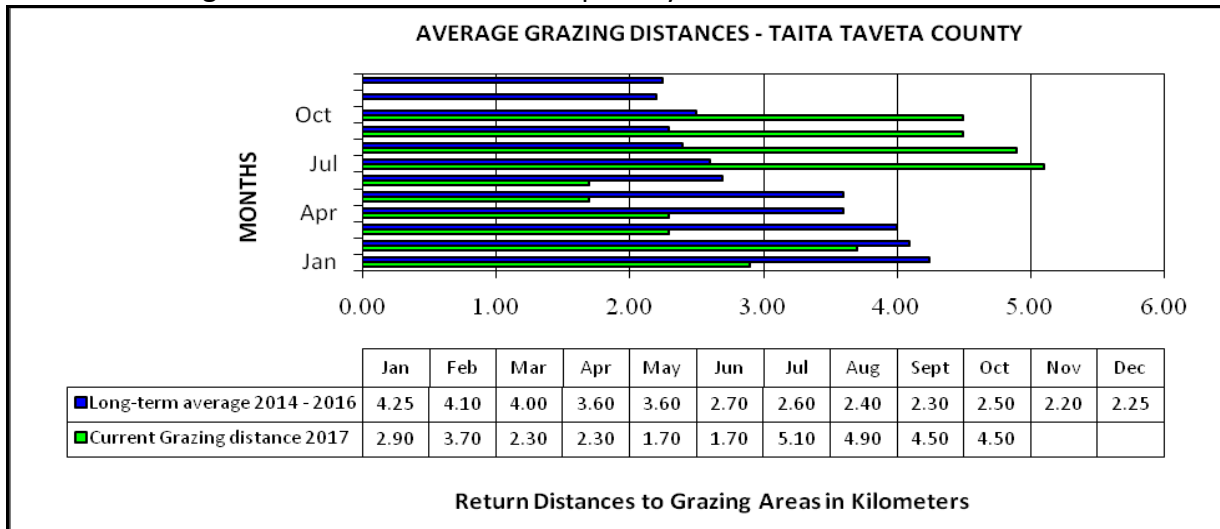
3. PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION
3.1.1 Livestock Body Condition

- In the mixed farming: horticulture/ dairy and mixed farming: irrigated cropping/ livestock livelihood zones cattle body condition was fair while that of goat was good.
- In the mixed farming: food crop/livestock livelihood zone the cattle body condition was categorized as good, fair and poor by 23.1 percent, 53.8 percent and 23.1 percent of the communities interviewed respectively while that of goat was good.
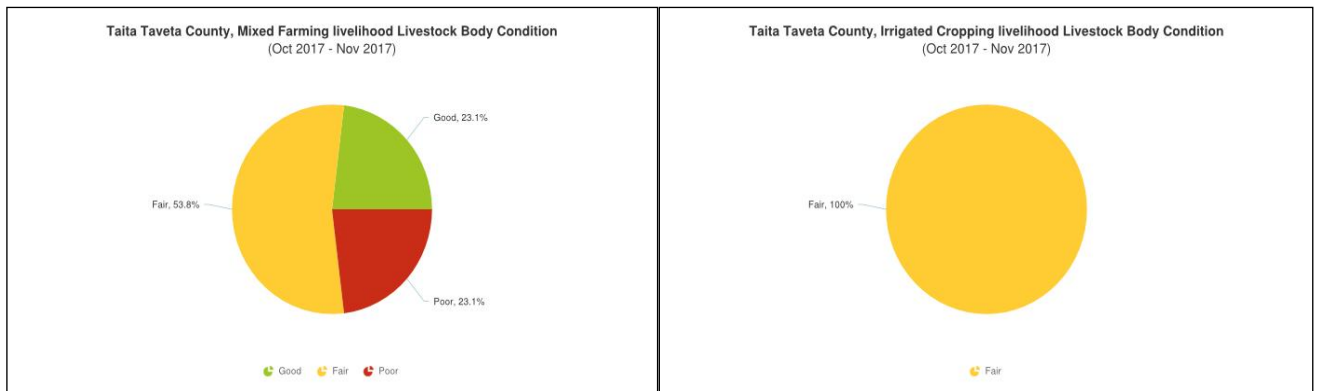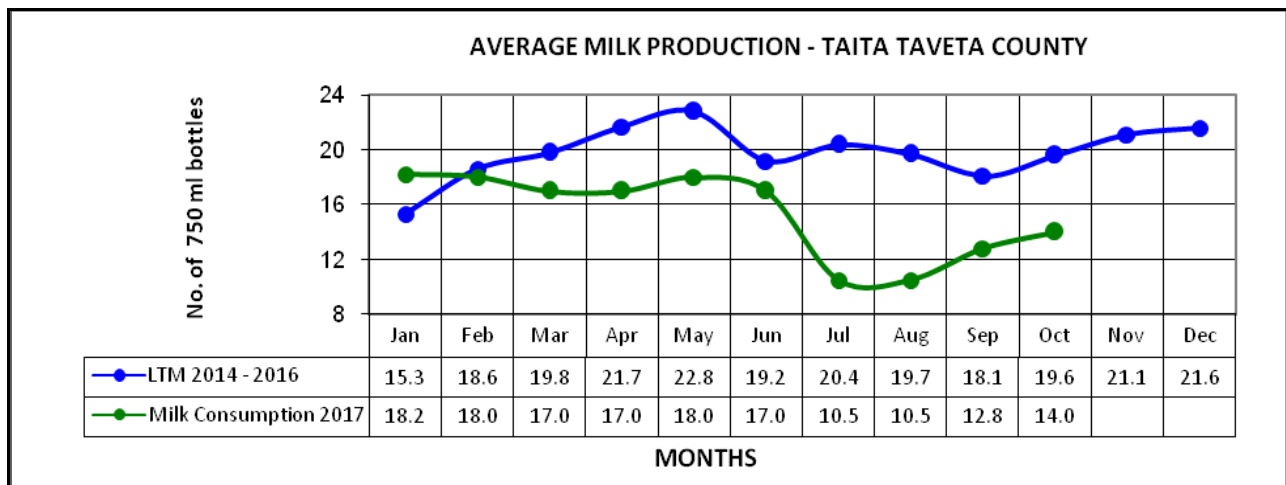

3.1.2 Livestock Diseases

5

- No major cases of livestock diseases were reported.

3.1.3 Milk Production
- The average milk production per day increased to 14 litres from 12.8 litres posted in the previous month.
- Out of 210 households sampled milk production in Mboghoni, Wumingu, Wusi, Kasigau, Ngolia and Challa wards was at 28.8%, 26.3%, 16.4%, 13.1%, 13.1% and 2.2% respectively.
- Milk production was high in Mboghoni Ward since farmers changed to zero grazing while low production in rain fed areas of Challa Ward where pasture depletion was high.
- Average milk price per litre at household level increased to Kshs 62.5 from Kshs 57.0.

AVERAGE MILK PRODUCTION - TAITA TAVETA COUNTY

No. of 750 ml bottles

MONTHS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LTM 2014 - 2016	15.3	18.6	19.8	21.7	22.8	19.2	20.4	19.7	18.1	19.6	21.1	21.6
Milk Consumption 2017	18.2	18.0	17.0	17.0	18.0	17.0	10.5	10.5	12.8	14.0		

3.2 RAIN-FED CROP PRODUCTION
3.2.1 Stage and Condition of food Crops
- In the mixed farming: food crop/ livestock and horticulture/dairy livelihood zones farmers were busy planting.
- In the mixed farming: Irrigated cropping/ livestock livelihood zone farmers were busy harvesting beans, tomatoes and bananas.
- Other crops included; onions and kales that were at various stages of growth and the crop condition were good.
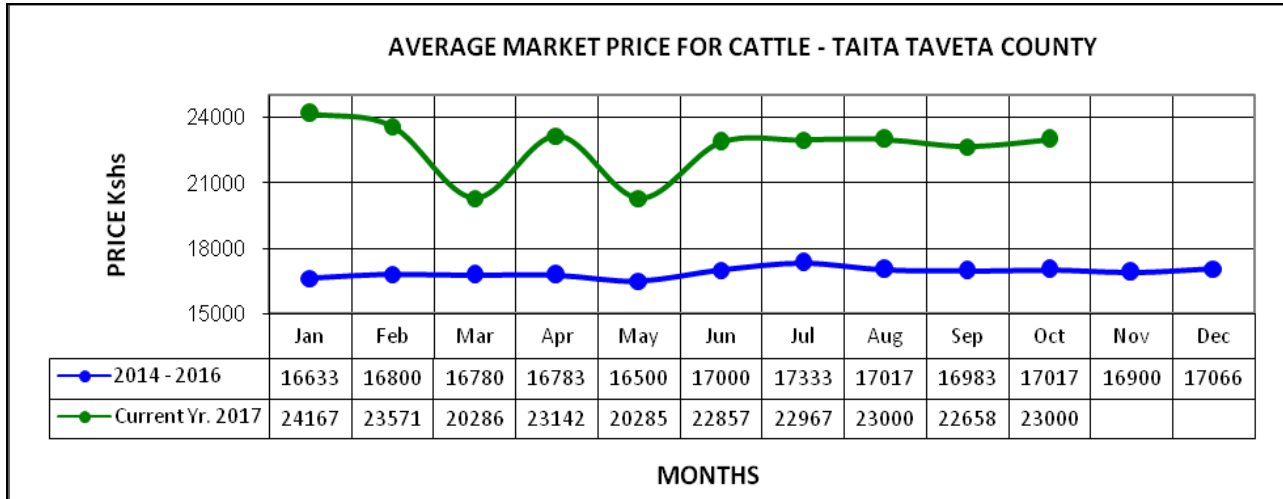- No major cases of pest or diseases were reported.

4.0 MARKET PERFORMANCE

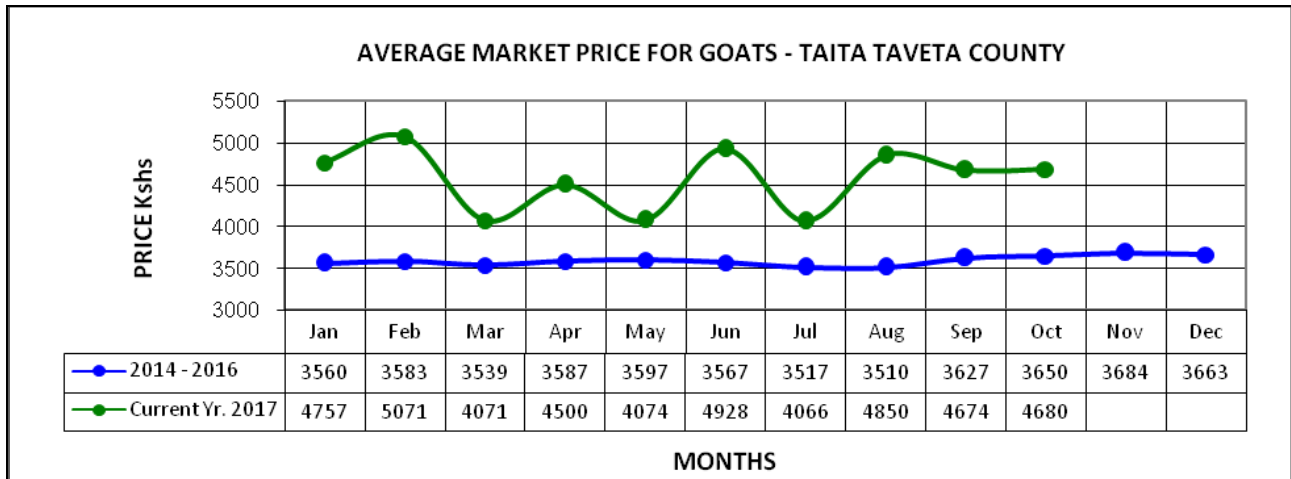### 4.1 LIVESTOCK MARKETING
4.1.1 Cattle Prices
- The average market price of a three year old bull increased to Kshs 23,000 from Kshs 22,658 recorded in the previous month and the trend is normal at this time of the year.
- Compared to the long term mean, the average price was higher by 35.1%.
- Comparatively, in the horticulture/dairy livelihood zone cattle prices ranged between Kshs 25,000 to Ksh 38,000 while in hotspot areas mainly in food crops/livestock livelihood zone prices ranged between Kshs 9,000 to Kshs 18,000 and this was mainly

attributed to variation in body condition in the latter ranged from good to fair while in the former due to drought the body condition was generally fair.

AVERAGE MARKET PRICE FOR CATTLE - TAITA TAVETA COUNTY

PRICE Kshs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014 - 2016	16633	16800	16780	16783	16500	17000	17333	17017	16983	17017	16900	17066
Current Yr. 2017	24167	23571	20286	23142	20285	22857	22967	23000	22658	23000		

MONTHS

4.1.2 Goat Prices

- The average market price of goat slightly increased to Kshs 4,680 from Ksh 4,674 in the previous month at household level which is normal during this time of the year.
- Livelihood variations were notable, in the horticulture/dairy livelihood zone goat prices ranged between Kshs 3,000 to Kshs 6,000 while in the mixed farming: food crops/ livestock livelihood zone prices ranged between Kshs 2,500 to Kshs 5,000.
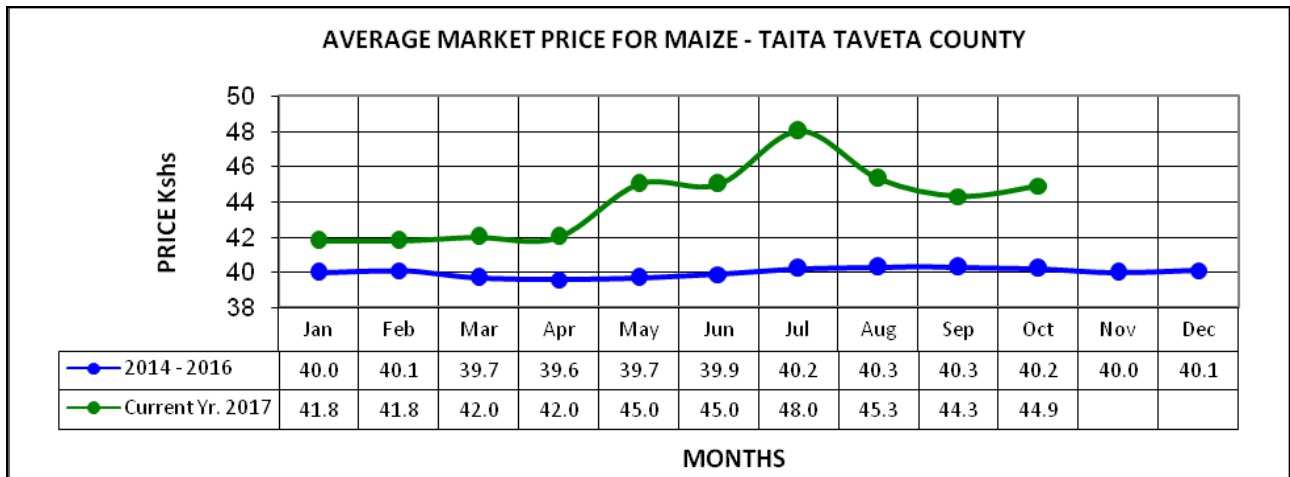- Compared to long term mean, the average price was higher by 28.2%.

AVERAGE MARKET PRICE FOR GOATS - TAITA TAVETA COUNTY

PRICE Kshs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014 - 2016	3560	3583	3539	3587	3597	3567	3517	3510	3627	3650	3684	3663
Current Yr. 2017	4757	5071	4071	4500	4074	4928	4066	4850	4674	4680		

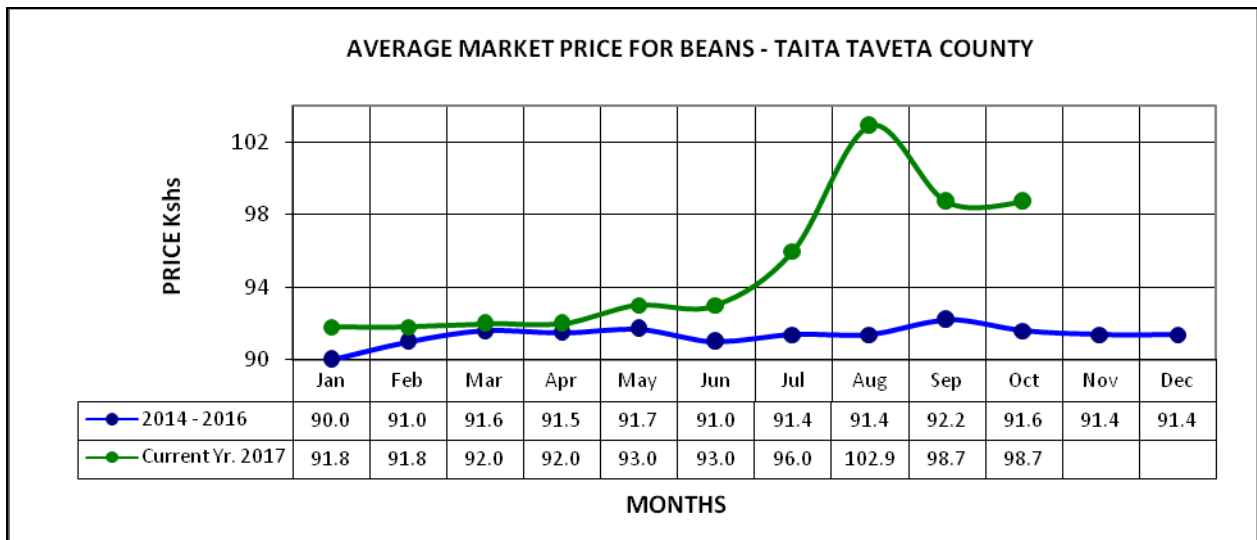MONTHS

4.2 CROP PRICES
4.2.1 Maize

- The average market price of a kilo of maize increased to Kshs 44.9 from Kshs 44.3 in the previous month.
- The prices ranged from Kshs 42.00 to Kshs 45.00 in the mixed farming: irrigated cropping/livestock livelihood zone, areas of Challa and Eldoro in Taveta Sub County.

- Highest prices were recorded in the mixed farming: food crops/livestock livelihood zone, Mghange Dawida, Mwakajo, Rukanga and Mwachawaza at Kshs 48.00 to Kshs 54.00 in Taita, Voi and Mwatate Sub Counties.
- Compared to the long term mean the price trend is not normal and higher by 11.7%.

AVERAGE MARKET PRICE FOR MAIZE - TAITA TAVETA COUNTY

|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014 - 2016	40.0	40.1	39.7	39.6	39.7	39.9	40.2	40.3	40.3	40.2	40.0	40.1
Current Yr. 2017	41.8	41.8	42.0	42.0	45.0	45.0	48.0	45.3	44.3	44.9		

MONTHS

4.2.2 Beans
- Average price of a kilo of beans retailed at Kshs 98.7 as posted in the previous month.
- Lowest prices were recorded in mixed farming: irrigated cropping/livestock/food crops livelihood zone; Challa at Kshs 70- 90 due to harvests from irrigation schemes, while high prices were recorded in the mixed farming: food crops/livestock livelihood zone of Kshs 90 to 120 in Mwakajo, Mwachawaza and Rukanga markets.
- Compared to the long term mean the price was higher by 7.8%.

AVERAGE MARKET PRICE FOR BEANS - TAITA TAVETA COUNTY

|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014 - 2016	90.0	91.0	91.6	91.5	91.7	91.0	91.4	91.4	92.2	91.6	91.4	91.4
Current Yr. 2017	91.8	91.8	92.0	92.0	93.0	93.0	96.0	102.9	98.7	98.7		

MONTHS

4.3 INCOME
- Household main sources of income were casual labour, trade, employment, sale of crops and sale of livestock products at 70.0%, 17.9%, 10.1%, 1.4% and 0.5% respectively.
- Casual labour opportunities were available in the sisal plantation, mining sector, irrigation schemes, ranches, building sites and town centres.

Taita Taveta County Households Main Income Sources (October 2017)
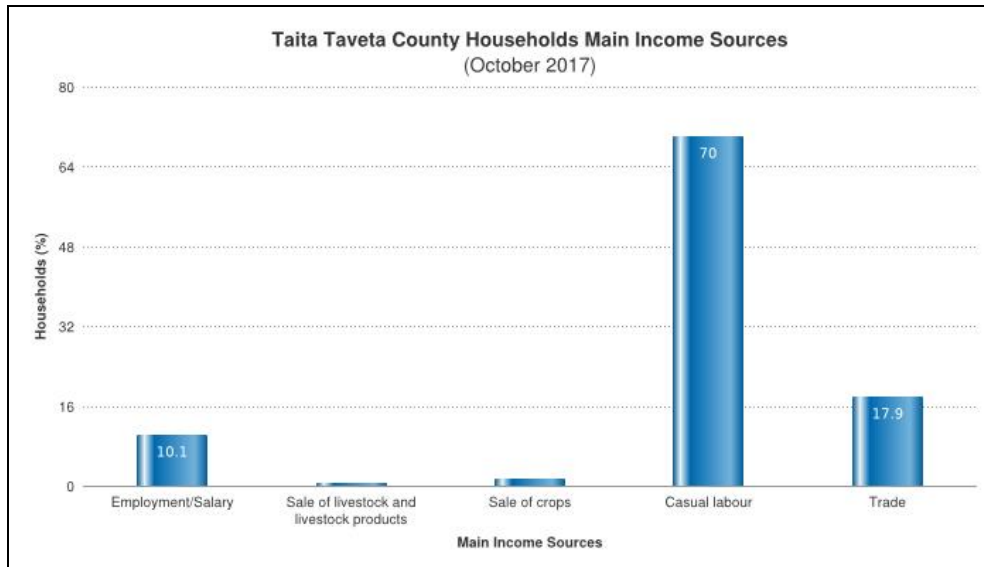
4.4 TERMS OF TRADE

▪ Terms of trade were below the LTM. Proceeds of a sale of goat purchased 84.6 kg of maize compared to 105.4 kg during the previous month.
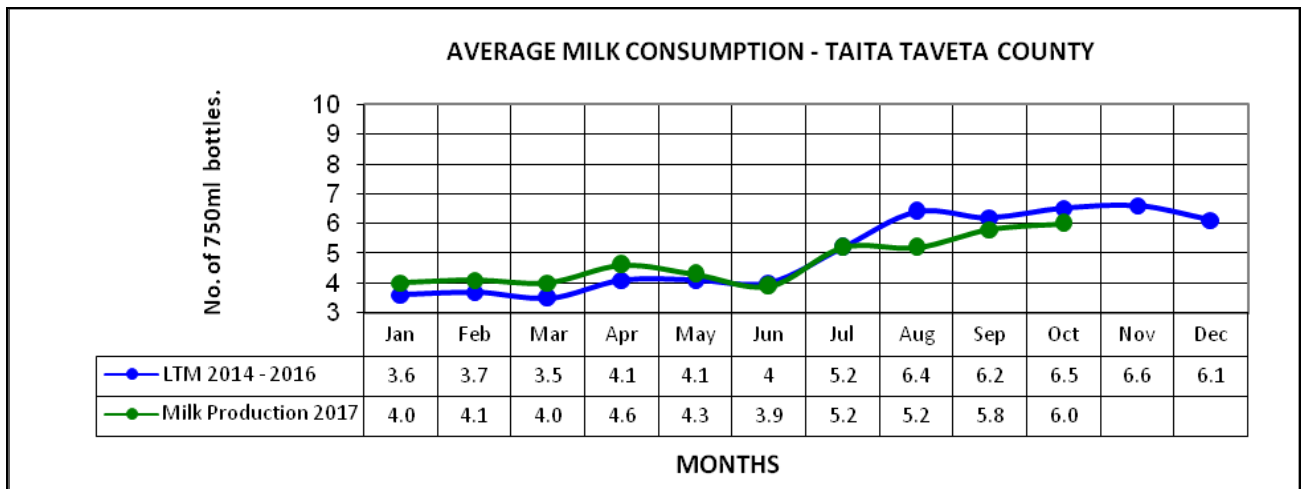

Terms of Trade - Taita Taveta County
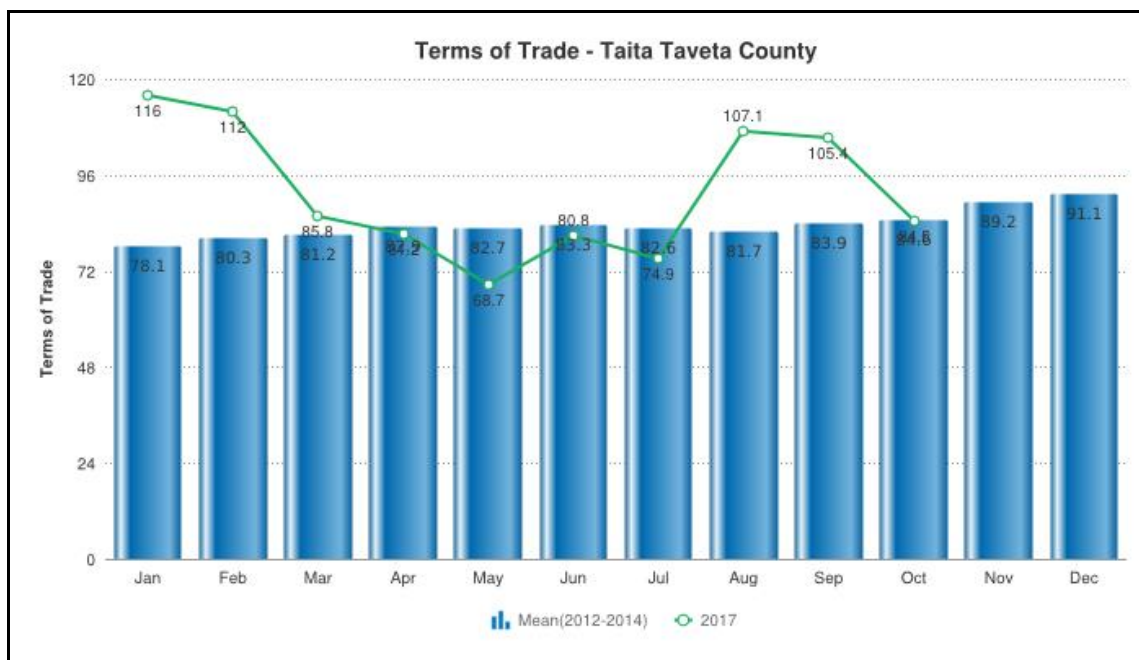
## 5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

▪ The milk consumption per day from thirty sampled households increased to 6.0 litres from 5.8 litres as posted in the previous month.

▪ The increment in milk consumption was attributed to good body condition of cattle in the mixed farming: horticulture/ dairy livelihood zone in Wumingu Ward.

- The quantity of milk consumed was high in mixed farming: horticulture/ dairy livelihood zone Wumingu Ward, while low consumption was recorded in the mixed farming: food crops/livestock livelihood zone Ngolia, Wusi, Kasigau and Challa Wards.

AVERAGE MILK CONSUMPTION - TAITA TAVETA COUNTY

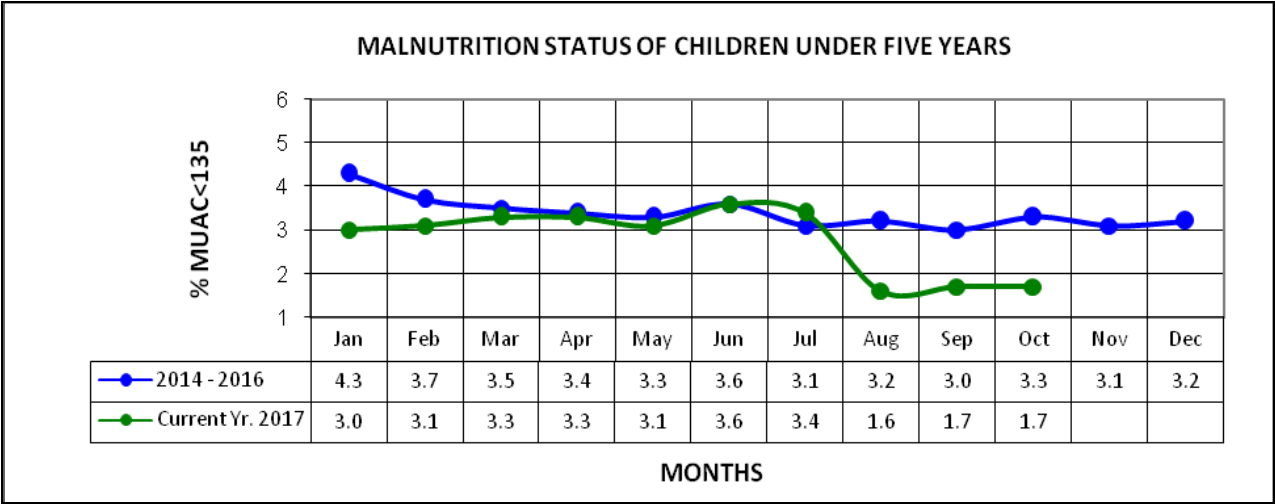| MONTHS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LTM 2014 - 2016	3.6	3.7	3.5	4.1	4.1	4	5.2	6.4	6.2	6.5	6.6	6.1
Milk Production 2017	4.0	4.1	4.0	4.6	4.3	3.9	5.2	5.2	5.8	6.0		

5.2 FOOD CONSUMPTION SCORE
- The number of households with acceptable, borderline and poor food consumption score during the month was 52.8, 45.1 and 2.1 percent respectively.
- Compared to previous month Taita Sub County showed an improvement where 40% of households moved to acceptable FCS from borderline.
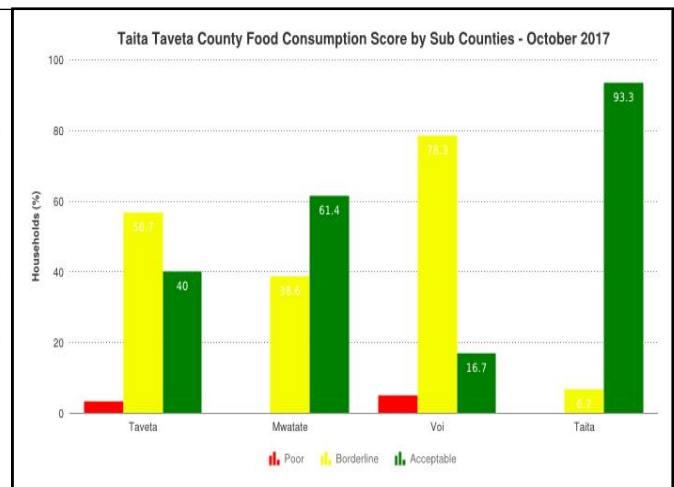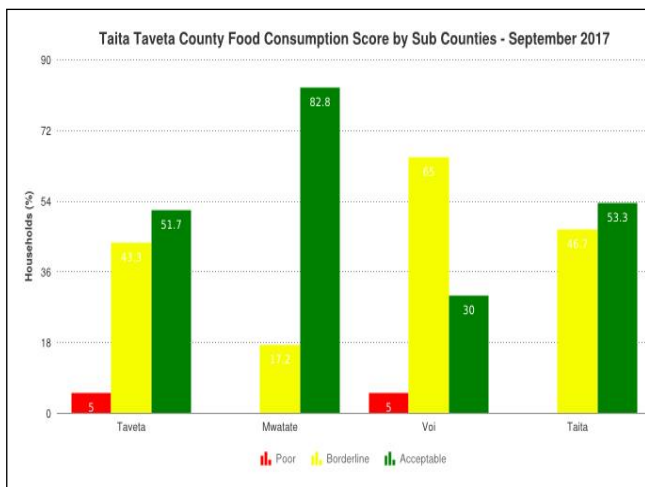
5.3 HEALTH AND NUTRITION STATUS
5.3.1 Nutrition Status
- Compared to the previous month, Mid Upper Arm Circumference (MUAC) measurement for nutrition status of children below five years percentage of those rated as being at risk of malnutrition remained at 1.7.
- Out of 655 children observed 12 were found with MUAC less than 135mm.
- Compared to long term mean MUAC level is lower by 48.4%.

MALNUTRITION STATUS OF CHILDREN UNDER FIVE YEARS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014 - 2016	4.3	3.7	3.5	3.4	3.3	3.6	3.1	3.2	3.0	3.3	3.1	3.2
Current Yr. 2017	3.0	3.1	3.3	3.3	3.1	3.6	3.4	1.6	1.7	1.7		

5.3.2 Health
- Cases of fever with chills like malaria and fever with breathing difficulties were at 3.5% and 0.5% respectively.

5.3.3 Coping Strategies.
- The CSI for the month under review was recorded at 5.30 compared to 4.87 posted in the previous month. This illustrates that increased frequency in utilization of coping strategies especially in the mixed farming: food crop / livestock livelihood zone.

Taita Taveta County - Coping Strategy Index
October 2017
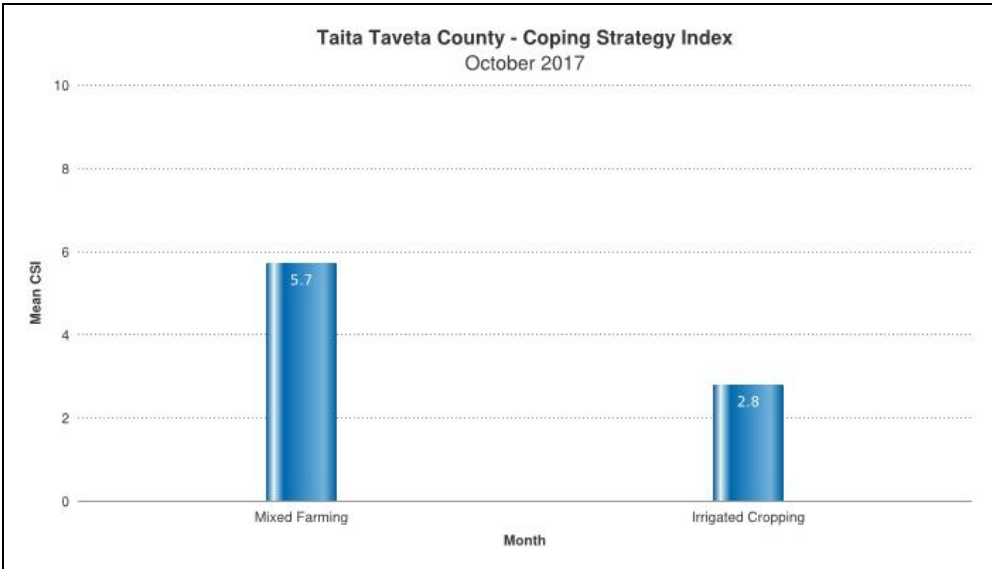
6.0   CURRENT INTERVENTION MEASURES (ACTION)

6.1   FOOD AND NON FOOD INTERVENTIONS
6.1.1 Sectoral

Intervention	Achievements in August 2017
Social Protection	
General Food Distribution	Distribution of relief food to primary and secondary schools i.e. 2000, (50kg) bags of Maize, 500 (90kg) bags of beans and 100 (24x0.5ltr) cartons of vegetable oil from the County Commissioner's office
livestock	
Livestock supplementary feeds	Distribution of 700 bags of drought meal and 120 bottles of Bayticol

7.0   EMERGING ISSUES

7.1   HOTSPOTS
- Areas that have experienced long dry spell since December 2016 and require constant food or non food assistance are Kishushe, Mwaroko, Sangenyi, Mlilo and Mbulia.

7.2   MIGRATION
- No major in or out migration was reported in the month under review.

7.3   CONFLICT
- Elephant menace continued to be reported in areas bordering the park. Also, predation of livestock by wild cats remains a challenge in these areas i.e. Ngolia, Kasigau, Maungu, Sagalla, Mbololo, Bura and Chawia Wards.

7.4   FOOD SECURITY PROGNOSIS
- In the next three months food security is expected to improve due to short rains.
- Farmers are expected to harness roof and runoff water.
- Harvest short term maturing crops like green leafy vegetables.
- Availability of these products will create ample time for household members to carry out other income generating activities other than trekking long distances in search of water and pasture.
- Also more time will be allocated to care for the young ones and the elderly.
- Livestock body condition is expected to improve due to shorter distances covered in search of water, pasture and browse.
- Livestock production is expected to enhance and this will improve utilization especially for children below five years.
- Prices of pulses are projected to fall due to harvests.
- Preparedness activities should be implemented to promote resilience of the community during the drought period.
- LRA 2017 population in need of food assistance was at 77,694 (2009 census KNBS).

8. RECOMMENDATIONS.

Agriculture and Livestock Sector
- Crop protection especially in irrigated zone.
- Provision of supplementary feed in areas experiencing pasture stress.

Water and Irrigation Sector
- Provision of water treatment tabs mainly in rain fed lowlands.
- Promotion of water harvesting structures at household level.

Health and Nutrition
- Strengthen malnutrition screening and active case search and integrated management of acute malnutrition especially in the lowlands of the county.